

Appl. No. 10/505.287; Docket No. FR02 0010US  
Amdt. dated August 14, 2006  
Response to Office Action dated May 25, 2006

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REMARKS/ARGUMENTS

Claims 1-13 remain pending in this application.

In response to Restriction Requirement, in telephone conversation with Examiner on May 16, 2006, Applicant elected without traverse to prosecute the invention of Group I, claims 1-9 drawn to a method of forming electrical connections. Applicant herewith confirms this election.

Please cancel claims 10-12, and 13 without prejudice.

Claims 1-3 and 7-9 are rejected under 35 U.S.C. §102(b) as being anticipated by *Hause et al.* (U.S. Patent 5,834,625, hereinafter *Hause*).

Claims 4-6 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Hause* in view of *Wolf*, Silicon Processing for the VLSI Era, Vol 4, Lattice Press (2002) hereinafter *Wolf*.

The §102 Rejection

Applicant respectfully traverses the rejection in that a *prima facie* case for anticipation has not been made in citing *Hause* as a reference. Upon a review of the Office Action, Item 7, Applicant notes “etching mask (108) on the intermediate layer (104/106)” has “a border layer 106 . . . formed on the upper surface of interlevel dielectric layer 104 (col. 6, lines 29-30 and FIG. 2).” There are two layers, the border layer 106 and the interlevel dielectric layer 104.

In contrast, Applicant’s claimed features only include “depositing an intermediate layer of material (14) on a substrate (Claim 1).” There is only a single layer.

Consequently, *Hause* does not anticipate Applicants’ invention.

Pcr MPEP §2131:

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference.” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631.2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim.

In view of the foregoing, Applicants respectfully assert that the rejections under 35 USC 102(b) be withdrawn for Claims 1-3 and 7-9.

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The §103 Rejection

Applicant respectfully traverses the rejection in that a *prima facie* case for obviousness has not been made.

With respect to claim 4, the Office Action concedes that *Hause* does not expressly disclose that the side-walls of the aperture are coated by means of a dielectric material having a low dielectric constant. However, the citation of *Wolf* does not make up for this deficiency, in that *Hause* neither suggests nor teaches low dielectric constant material coatings as used in the context of Applicant's invention. It is well established to assert a proper §103 rejection there must be a basis in the art for combining or modifying references. MPEP §2143.01 provides:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)

Furthermore, the wafer fabrication arts involve the use of manufacturing processes that are often specific to a family of product. One skilled in the art would not take the suggestion to willy-nilly combine two disparate semiconductor processes to come up with a third process, as in the case of the present rejection. In these processes, a number of recipes are combined to build layers of an integrated circuit device resulting in, ultimately, a complete functioning device. *Hause*, in not making a mention of the use of low-k dielectric, would not lead the artisan to modify his process to use a low-k dielectrics. Applicant contends that to modify *Hause* in this manner (according to *Wolf*) would destroy the intent of *Hause*.

References are not properly combinable or modifiable if their intended function is destroyed. The CCPA and the Federal Circuit have held that when a 103 rejection is based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference, such a proposed modification is not proper and the *prima facie* case of obviousness can not be properly made. See *in re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir 1984).

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With respect to claim 5, the Office action concedes that *Hause* does not expressly disclose that "the dielectric material of the coating layer is chosen among fluorous glass. ." By the arguments present *supra*, in reference to claim 4 the Office Action does not make the case for obviousness under §103.

With respect to claim 6, again as in the discussion of claims 4 and 5, combining *Hause* with *Wolf* does not make up for the deficiencies of *Hause*. The structure proposed in the Office Action is neither taught nor suggested by either reference alone or in combination.

Consequently, a case for obviousness under §103 has not been made. Applicants request that the §103 rejections for claims 4-6 be withdrawn.

### Conclusion

Applicant believes he has addressed the Examiner's concerns. Applicant asserts that the claims are allowable over the cited references. Applicants earnestly requests that a timely Notice of Allowance be forthcoming.

Please charge any fees other than the issue fee and credit any overpayments to Deposit Account 14-1270.

Respectfully submitted,

Date: 14-AUG-2006

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